

APPENDIX A

Introduction

To the extent sections contained in this Appendix set forth technical references, technical standards, technical requirements, and/or performance standards, GTE's obligation to comply with such references, requirements, and/or standards shall be subject to Section 23.19 of the General Terms and Conditions of this Agreement.

1. The Network Interface Device (NID) shall be provided to AT&T in accordance with the following technical references:
 - 1.1 Bellcore Technical Advisory TA-TSY-000120 "Customer Premises or Network Ground Wire";
 - 1.2 Bellcore Generic Requirement GR-49-CORE "Generic Requirements for Outdoor Telephone Network Interface Devices";
 - 1.3 Bellcore Technical Requirement TR-NWT-00239 "Indoor Telephone Network Interfaces";
 - 1.4 Bellcore Technical Requirement TR-NWT-000937 "Generic Requirements for Outdoor and Indoor Building Entrance"; and,
 - 1.5 Bellcore Technical Requirement TR-NWT-000133 "Generic Requirements for Network Inside Wiring."
2. The Loop shall be equal to or better than each of the applicable interface references set forth in the following technical references:
 - 2.1 Bellcore TR-NWT-000049, "Generic Requirements for Outdoor Telephone Network Interface Devices," Issued December 1, 1994;
 - 2.2 Bellcore TR-NWT-000057, "Functional Criteria for Digital Loop Carrier Systems," Issued January 2, 1993;
 - 2.3 Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines";

- 2.4 Bellcore TR-NWT-000253, SONET Transport Systems: Common Criteria (A module of TSGR, FR-NWT-000440), Issue 2, December 1991;
- 2.5 AT&T Data Communications Technical Reference TR 62310, DS0 Digital Local Channel Description and Interface Specification, August 1993; Also Addendum 1 and Addendum 2; and
- 2.6 AT&T Technical Reference TR 62411, ACCUNET T1.5 Service Description and Interface Specification, December 1990; Addendum 1, March 1991; Addendum 2, October 1992.
- 2.7 AT&T Technical Reference TR 62421, ACCUNET Spectrum of Digital Services Description and Interface Specification, December 1989; Also TR 62421A Addendum 2, November 1992.
- 2.8 ANSI T1.106 - 1988, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (Single Mode).
- 2.9 ANSI T1.105 - 1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats.
- 2.10 ANSI T1.102 - 1993, American National Standard for Telecommunications - Digital Hierarchy - Electrical Interfaces.
- 2.11 ANSI T1.403- 1989, American National Standard for Telecommunications - Carrier to Customer Installation, DS1 Metallic Interface Specification
- 2.12 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria.
- 2.13 AT&T Technical Reference TR 54014, ACCUNET T45 Reserved Services - Service Description and Interface Specification, May 1992.
- 2.14 AT&T Technical Reference TR 54018, ACCUNET T155 Service Description and Interface Specification.
- 2.15 Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch, Issue 2, August 1987.

- 2.16 Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, Issue 2, December 1992; Rev.1, December 1993; Supplement 1, December 1993.
- 2.17 Bellcore TR-TSY-000673, Operations Systems Interface for an IDLC System, (LSSGR) FSD 20-02-2100, Issue 1, September 1989.
- 2.18 AT&T Technical Reference TR-62415 "Access Specifications for High Capacity DS1/DS3 Dedicated Digital Service";
- 2.19 Bellcore Technical Requirement TR-NWT-000499, Issue 5, December 1993, section 7 for DS1 interfaces.
- 3. Local Switching shall be equal to or better than the references for Local Switching set forth in Bellcore's Local Switching Systems General Requirements (FR-NWT-000064) and shall be offered in accordance with the following technical references:
 - 3.1 GR-1298-CORE, AIN Switching System Generic Requirements;
 - 3.2 GR-1299-CORE, AIN Switch-Service Control Point (SCP)/Adjunct Interface Generic Requirements;
 - 3.3 TR-NWT-001284, AIN 0.1 Switching System Generic Requirements;
 - 3.4 SR-NWT-002247, AIN Release 1 Update.
- 4. Interface to Loop References:
 - 4.1 Basic Rate Interface ISDN adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;
 - 4.2 Primary Rate ISDN to PBX adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;
 - 4.3 Loops adhering to Bellcore TR-NWT-08 and TR-NWT-303 specifications to interconnect Digital Loop Carriers.
- 5. Interface to Loop for ISDN References

- 5.1 GTE shall provide the BRI U interface using 2 wire copper loops in accordance with TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
- 5.2 GTE shall provide the BRI interface using Digital Subscriber Loops adhering to Bellcore TR-NWT-303 specifications to interconnect Digital Loop Carriers.
- 5.3 GTE shall offer PSD interfaces adhering to the X.25, S.75 and S.75' ANSI and Bellcore requirements.
6. At a minimum, Common Transport shall be provided to AT&T in accordance with the following technical references (as applicable for the transport technology being used):
 - 6.1 ANSI T1.101-1994, American National Standard for Telecommunications - Synchronization Interface Standard Performance and Availability;
 - 6.2 ANSI T1.102-1993, American National Standard for Telecommunications - Digital Hierarchy - Electrical Interfaces;
 - 6.3 ANSI T1.102.01-199x, American National Standard for Telecommunications - Digital Hierarchy - VT1.5;
 - 6.4 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;
 - 6.5 ANSI T1.105.01-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Automatic Protection Switching;
 - 6.6 ANSI T1.105.02-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Payload Mappings;
 - 6.7 ANSI T1.105.03-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Jitter at Network Interfaces;
 - 6.8 ANSI T1.105.03a-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET): Jitter at Network Interfaces - DS1 Supplement;

- 6.9 ANSI T1.105.05-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Tandem Connection;
- 6.10 ANSI T1.105.06-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Physical Layer Specifications;
- 6.11 ANSI T1.105.07-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Sub STS-1 Interface Rates and Formats;
- 6.12 ANSI T1.105.09-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Network Element Timing and Synchronization;
- 6.13 ANSI T1.106-1988, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (Single Mode);
- 6.14 ANSI T1.107-1988, American National Standard for Telecommunications - Digital Hierarchy - Formats Specifications;
- 6.15 ANSI T1.107a-1990 - American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications (DS3 Format Applications);
- 6.16 ANSI T1.107b-1991 - American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications;
- 6.17 ANSI T1.117-1991, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach);
- 6.18 ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH);
- 6.19 ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels;
- 6.20 Bellcore FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements;
- 6.21 Bellcore GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance;

- 6.22 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria;
- 6.23 Bellcore TR-NWT 000507, Transmission, Section 7, Issue 5 (Bellcore, December 1993). (A module of LSSGR, FR-NWT-000064.);
- 6.24 Bellcore TR-INS-000342, High-Capacity Digital Special Access Service-Transmission Parameter Limits and Interface Combinations, Issue 1 February 1991;
- 6.25 Bellcore ST-TEC 000052, Telecommunications Transmission Engineering Textbook, Volume 2: Facilities, Third Edition, Issue 1 May 1989;
- 6.26 Bellcore ST-TEC-000051, Telecommunications Transmission Engineering Textbook Volume 1: Principles, Third Edition. Issue 1 August 1987;
- 7. At a minimum, Dedicated Transport shall be provided to AT&T in accordance with the following technical references:
 - 7.1 ANSI T1.105.04-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Data Communication Channel Protocols and Architectures;
 - 7.2 ANSI T1.119-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications;
 - 7.3 ANSI T1.119.01-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Protection Switching Fragment;
 - 7.4 ANSI T1.119.02-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Performance Monitoring Fragment;
 - 7.5 ANSI T1.231-1993 -American National Standard for Telecommunications - Digital Hierarchy - Layer 1 In-Service Digital Transmission performance monitoring.

- 7.6 AT&T Technical Reference TR 54016, Requirements For Interfacing Digital Terminal Equipment To Services Employing The Extended Superframe Format, September 1989;
- 7.7 AT&T Technical Reference TR 62421 ACCUNET Spectrum of Digital Services Description And Interface Specification, December 1989 and all addenda;
- 7.8 AT&T Technical Reference TR 62310, DS0 Digital Local Channel Description And Interface Specification, August 1993 and all addenda; and
- 7.9 AT&T Technical Reference TR 62415, Access Specification For High Capacity (DS1/DS3) Dedicated Digital Service, June 1989 and all addenda.
- 8. Digital Cross-Connect System (DCS) shall be provided to AT&T in accordance with the following technical references:
 - 8.1 AT&T Technical Reference TR 62421 ACCUNET® Spectrum of Digital Services Description And Interface Specification, December 1989 and TR 62421A Addendum 2, November 1992;
 - 8.2 AT&T Data Communications Technical Reference TR 62310 DS0 Digital Local Channel Description and Interface Specification, August 1993, and all addenda;
 - 8.3 AT&T Technical Reference TR 62415 Access Specification For High Capacity (DS1/DS3) Dedicated Digital Service, June 1989, and all addenda including TR 62415A3 July, 1992;
 - 8.4 AT&T Technical Reference TR 62411 ACCUNET® T1.5 Service Description And Interface Specification, December 1990 and all addenda including Addendum 2, October 1992;
 - 8.5 AT&T Technical Reference TR 54014 ACCUNET® T45 and T45 Reserved Services - Service Description And Interface Specification;
 - 8.6 AT&T Technical Reference TR 54018 OC-3 Optical Interface Specifications, November 1991;
 - 8.7 AT&T Technical Reference TR 54016 Requirements For Interfacing Digital Terminal Equipment To Services Employing The Extended Superframe Format, September 1989;

- 8.8 ANSI T1.102-1993, American National Standard for Telecommunications - Digital Hierarchy - Electrical Interfaces;
- 8.9 ANSI T1.102.01-199x, American National Standard for Telecommunications - Digital Hierarchy - VT1.5;
- 8.10 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;
- 8.11 ANSI T1.105.03-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Jitter at Network Interfaces;
- 8.12 ANSI T1.105.03a-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET): Jitter at Network Interfaces - DS1 Supplement;
- 8.13 ANSI T1.105.06-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Physical Layer Specifications;
- 8.14 ANSI T1.106-1988, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (Single Mode);
- 8.15 ANSI T1.107-1988, American National Standard for Telecommunications - Digital Hierarchy - Formats Specifications;
- 8.16 ANSI T1.107a-1990 - American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications (DS3 Format Applications);
- 8.17 ANSI T1.107b-1991 - American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications;
- 8.18 ANSI T1.117-1991, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach);
- 8.19 ANSI T1.403-1989, Carrier to Customer Installation, DS1 Metallic Interface Specification;
- 8.20 ANSI T1.404-1994, Network-to-Customer Installation - DS3 Metallic Interface Specification;

- 8.21 ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH);
 - 8.22 ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels;
 - 8.23 FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements;
 - 8.24 GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance;
 - 8.25 GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria; and
 - 8.26 TR-NWT-000776, Network Interface Description for ISDN Customer Access.
-
- 9. Signaling Transfer Points (STPs) shall be provided to AT&T in accordance with the following technical references:
 - 9.1 ANSI T1.111-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP);
 - 9.2 ANSI T1.111A-1994 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP) Supplement;
 - 9.3 ANSI T1.112-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Signaling Connection Control Part (SCCP);
 - 9.4 ANSI T1.115-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Monitoring and Measurements for Networks;
 - 9.5 ANSI T1.116-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Operations, Maintenance and Administration Part (OMAP);
 - 9.6 ANSI T1.118-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Intermediate Signaling Network Identification (ISNI);

- 9.7 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP); and
- 9.8 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).
- 10. SCPs/Databases shall be equal to or better than all of the references for SCPs/Databases set forth in the following technical references:
 - 10.1 GR-246-CORE, Bell Communications Research Specification of Signaling System Number 7, ISSUE 1 (Bellcore, December 1995);
 - 10.2 GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP). (Bellcore, March 1994);
 - 10.3 GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service 6, Issue 1, Rev. 1 (Bellcore, October 1995);
 - 10.4 GR-1149-CORE, OSSGR Section 10: System Interfaces, Issue 1 (Bellcore, October 1995) (Replaces TR-NWT-001149);
 - 10.5 GR-1158-CORE, OSSGR Section 22.3: Line Information Database 6, Issue (Bellcore, October 1995)
 - 10.6 GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service (Bellcore, May 1995); and
 - 10.7 BOC Notes on the RLEC Networks, SR-TSV-002275, ISSUE 2, (Bellcore, April 1994).
- 11. Signaling Transfer Points (STPs) shall offer SS7 AIN Access in accordance with the references of the following technical references:
 - 11.1 GR-2863-CORE, CCS Network Interface Specification Supporting Advanced Intelligent Network (AIN);

- 11.2 GR-2902-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll-Free Service Using Advanced Intelligent Network (AIN).
- 12. Tandem Switching shall meet or exceed the following technical references:
 - 12.1 Bell Communications Research TR-TSY-000540 issue 2R2, Tandem Supplement, 6/1/90.
 - 12.2 GR-905-CORE covering CCSNIS;
 - 12.3 GR-1429-CORE for call management features; and GR-2863-CORE and GR-2902-CORE covering CCS AIN interconnection.
- 13. GTE performance under Section 13 of Attachment 2 shall meet or exceed the performance standards and references set forth in the technical references listed below;
 - 13.1 Bell Communications Research, Inc. Documents
 - 13.1.1 FR-64, LATA Switching Systems Generic Requirements (LSSGR). This document contains 117 Technical References and Generic Requirements. Sections provide the requirements for local switching systems (also referred to as end offices) that serve customers' lines. Some modules of the LSSGR are also referenced separately in this document.
 - 13.1.2 TR-NWT-000499, Issue 5, Rev 1, April 1992, Transport Systems Generic Requirements (TSGR): Common Requirements.
 - 13.1.3 TR-NWT-000418, Issue 2, December 1992, Generic Reliability Assurance Requirements For Fiber Optic Transport Systems.
 - 13.1.4 TR-NWT-000057, Issue 2, January 1993, Functional Criteria for Digital Loop Carriers Systems.
 - 13.1.5 TR-NWT-000507, Issue 5, December 1993, LSSGR - Transmission, Section 7.
 - 13.1.6 GR-303-CORE, Issue 1, September 1995, Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface.

- 13.1.7 GR-334-CORE, Issue 1, June 1994, Switched Access Service: Transmission Parameter Limits and Interface Combinations.
- 13.1.8 TR-NWT-000335, Issue 3, May 1993, Voice Grade Special Access Services - Transmission Parameter Limits and Interface Combinations.
- 13.1.9 TR-TSY-000529, Issue 2, July 1987, Public Safety - LSSGR.
- 13.1.10 GR-1158-CORE, Issue 2, October 1995, OSSGR Section 22.3: Line Information Database.
- 13.1.11 TR-TSY-000511, Issue 2, July 1987, Service Standards, a Module (Section 11) of LATA Switching Systems Generic Requirements (LSSGR, FR-NWT-000064).
- 13.1.12 TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
- 13.1.13 TR-NWT-000909, December 1991, Generic Requirements and Objectives for Fiber In The Loop Systems.
- 13.1.14 TR-NWT-000505, Issue 3, May 1991, LSSGR Section 5, Call Processing.
- 13.1.15 FR-NWT-000271, 1993, Operator Services Systems Generic Requirements (OSSGR).
- 13.1.16 TR-NWT-001156, Issue 2, July 1993, OSSGR Operator Services Systems Generic Requirements, Section 21, Operator Subsystem.
- 13.1.17 SR-TSY-001171, Issue 1, January 1989, Methods and Procedures for System Reliability Analysis.
- 13.1.18 Bellcore Telecommunications Transmission Engineering, 3rd Ed, 1990.
- 13.2 ANSI Standards
 - 13.2.1 ANSI T1.512-1994, Network Performance - Point-to-Point Voice-Grade Special Access Network Voiceband Data Transmission Objectives.
 - 13.2.2 ANSI T1.506-1990, Network Performance - Transmission Specifications for Switched Exchange Access Network.

- 13.2.3 ANSI T1.508-1992, Telecommunications - Network Performance - Loss Plan for Evolving Digital Networks. Also supplement T1.508a-1993.
- 13.2.4 ANSI T1.101-1994, Digital Synchronization Network Plan.
- 13.3 TIA/EIA Standards
 - 13.3.1 Requirements not specifically addressed here shall be found in the documents listed in Electronic Industries Association/Telecommunications Industries Association Standards and Engineering Publications.
 - 13.3.2 TIA/EIA TSB-37A, Telephone Network Transmission Model for Evaluating Modem Performance.
 - 13.3.3 TIA/EIA TSB-38, Test Procedure for Evaluation of 2-wire 4 kHz Voiceband Duplex Modems.
- 13.4 IEEE Standards
 - 13.4.1 IEEE Standard 743-1984, IEEE Standard Methods and Equipment for Measuring Transmission Characteristics of Analog Voice Frequency Circuits.
 - 13.4.2 ANSI/IEEE Standard 820-1984, Telephone Loop Performance Characteristics.
- 13.5 AT&T Standards
 - 13.5.1 Outside Plant Engineering Handbook, August 1994.
 - 13.5.2 AT&T Pub. 60220, Issue 1, April 1991, 5ESS OSPS Interface Technical Specification for Domestic Toll And Assistance Applications.
 - 13.5.3 AT&T Technical Reference TR 43202, May 1985, AT&T Analog Voice Total and Coordinated Services.
 - 13.5.4 AT&T Technical Reference TR 41458, April 1990, Special Access Connection to the AT&T Network.
 - 13.5.5 AT&T Technical Reference TR 62415, June 1989, Access Specification For High Capacity (DS1/DS3) Dedicated Digital Service. Also TR 62415A2 November 1990, and TR 62415A3 July 1992 which are addenda to TR 62415.

- 13.5.6 AT&T Technical Reference TR 54016, September 1989, Requirements For Interfacing Digital Terminal Equipment To Services Employing The Extended Superframe Format.
- 13.5.7 AT&T Technical Reference TR 62411, December 1990, ACCUNET T1.5 Service Description And Interface Specification. Also Addendum 1 March 1991 and Addendum 2 October 1992.
- 13.5.8 AT&T Technical Reference TR 62421, December 1989, ACCUNET Spectrum of Digital Services Description And Interface Specification. Also TR 62421A Addendum 2 November 1992.
- 13.5.9 AT&T Data Communications Technical Reference TR 62310, August 1993, DS0 Digital Local Channel Description And Interface Specification. Also Addendum 2 November 1992.
- 13.5.10 AT&T Technical Reference TR 54014, 1992, ACCUNET T45 and T45 Reserved Services - Service Description And Interface Specification.
- 13.5.11 AT&T Technical Reference TR 54018, most current issue, ACCUNET T155 Service Description And Interface Specification.
- 14. The protocol interface references for SS7 Network Interconnection include the MTP, ISDNUP, SCCP, and TCAP. These protocol interfaces shall conform to the following specifications:
 - 14.1 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP);
 - 14.2 Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service;
 - 14.3 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services; and
 - 14.4 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).
 - 14.5 GTE shall set message screening parameters to block accept messages from AT&T local or tandem switching systems destined

to any signaling point in the GTE SS7 network with which the AT&T switching system has a legitimate signaling relation.

15. SS7 Network Interconnection shall be provided to AT&T in accordance with the following technical references:
 - 15.1 ANSI T1.110-1992 American National Standard Telecommunications - Signaling System Number 7 (SS7) - General Information;
 - 15.2 ANSI T1.111-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP);
 - 15.3 ANSI T1.111A-1994 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP) Supplement;
 - 15.4 ANSI T1.112-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Signaling Connection Control Part (SCCP);
 - 15.5 ANSI T1.113-1995 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Integrated Services Digital Network (ISDN) User Part;
 - 15.6 ANSI T1.114-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Transaction Capabilities Application Part (TCAP);
 - 15.7 ANSI T1.115-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Monitoring and Measurements for Networks;
 - 15.8 ANSI T1.116-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Operations, Maintenance and Administration Part (OMAP);
 - 15.9 ANSI T1.118-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Intermediate Signaling Network Identification (ISNI);
 - 15.10 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network

Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP);

- 15.11 Bellcore GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service;
- 15.12 Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service;
- 15.13 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services; and,
- 15.14 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

ATTACHMENT 3SERVICE DESCRIPTION: ANCILLARY FUNCTIONSTABLE OF CONTENTSSectionPage

SERVICE DESCRIPTION: ANCILLARY FUNCTIONS.....	1
1. Introduction.....	1
2. Collocation.....	1
3. Poles, Ducts, Conduits, Rights of Way (ROW).....	9

SERVICE DESCRIPTION: ANCILLARY FUNCTIONS

1. Introduction

This Attachment sets forth the descriptions and requirements for Ancillary Functions that GTE agrees to offer to AT&T under this Agreement. To the extent sections contained in this Appendix set forth technical references, technical standards, technical requirements, and/or performance standards, GTE's obligation to comply with such references, requirements, and/or standards shall be subject to Section 23.19 of the General Terms and Conditions of this Agreement.

2. Collocation

2.1 Definition: Collocation is the right of AT&T to obtain dedicated space in GTE's Local Serving Office (LSO) or other GTE locations and to place equipment in such spaces to interconnect with the GTE network or obtain access to unbundled network elements. Collocation also includes GTE providing resources necessary for the operation and economical use of collocated equipment.

2.1.1 Terms: Collocation shall be provided in accordance with this Agreement as supplemented by the applicable GTE federal and state collocation tariffs in effect as of the effective date of this Agreement. To the extent any matter relating to collocation is not already addressed in the terms of the Agreement, the terms of the tariffs will control.

2.2 Technical References

2.2.1 Upon request by AT&T, GTE shall provide space, as required by 47 CFR § 51.323 and as requested by AT&T, to meet AT&T's needs for placement of equipment, interconnection, or provision of services. Such space shall be provided in GTE's proposed central offices, serving wire center and tandem switches and at controlled environmental vaults, huts and cabinets. GTE will provide collocation as follows: physical collocation will be provided on a first-come, first-served basis, provided there is space available for collocation and provided there are reasonable security arrangements. If GTE determines that space is not available GTE shall provide virtual collocation for AT&T equipment, unless GTE demonstrates that virtual collocation is not available under currently Applicable Law. GTE and AT&T shall adhere to reasonable industry standard security measures, applied on a non-discriminatory basis.

- 2.2.1.1 AT&T will be allowed to designate or reserve space for its own use when it can produce specific detailed plans for the use of the space. GTE's right to reserve space or deny access to AT&T shall be considered on a case-by-case basis. It will be the burden of GTE to justify its actions with respect to any such reservation or denial. AT&T will pay for such space in accordance with the pricing terms of Attachment 14 and future order of the Commission. —
- 2.2.1.2 GTE is not required to construct additional space when none is available to meet a physical collocation request. However, in determining whether space is available to meet a request for physical collocation, GTE will offer contiguous space to AT&T where available. GTE will also take AT&T and other collocators demand into account when renovating existing facilities and constructing or leasing new facilities.
- 2.2.2 GTE shall provide intraoffice facilities (e.g., DS0, DS1, DS3, OC3, OC12, OC48, and STS-1 terminations) as requested by AT&T to meet AT&T's need for placement of equipment, interconnection, or provision of service.
- 2.2.3 Other than reasonable security restrictions, where AT&T's physical collocated space is located in space that is partitioned separately from GTE facilities, GTE shall place no restriction on access to the AT&T collocated space by AT&T's employees and designated agents. Such space shall be available to AT&T designated agents twenty-four (24) hours per day each day of the week. Where AT&T's collocated space is located in space that is not partitioned separately from GTE's facilities, GTE shall provide AT&T designated personnel escort service to and from AT&T's collocated space. Such escort service shall be available twenty-four (24) hours per day each day of the week. In no case should any reasonable security restrictions be more restrictive than those GTE places on their own personnel.
- 2.2.4 GTE will not place any restrictions on AT&T's use of its collocated space, other than limitations specified in this Agreement or limitations based on space availability and reasonable security requirements, applied in a nondiscriminatory manner. AT&T may collocate the amount and type of equipment in its collocated space that is necessary for interconnection functions (which include interconnection with GTE's network and other collocated carriers or access to GTE's unbundled network elements), including but not limited to transmission equipment and multiplexing equipment; provided however that AT&T may not collocate enhanced services equipment or equipment that can perform

switching functions, including without limitation remote switching modules.

- 2.2.5 GTE shall allow the interconnection of AT&T to other carriers who have collocated space within GTE's facility (e.g., GTE shall not require AT&T to interconnect with other carriers outside of GTE's facilities). This connection will be provisioned using EISCC (expanded interconnection service cross connect jumper) and will be priced as set forth in Attachment 14.
- 2.2.6 AT&T may select its own vendors for all required engineering and installation services associated with its physically collocated equipment subject to GTE's reasonable restrictions on third party vendors that GTE has decertified with good cause. GTE shall maintain and provide AT&T with a list of all such decertified vendors. Notwithstanding GTE decertification of a third party vendor, AT&T may use such vendor for work associated with its collocated equipment if such vendor is the only third party vendor reasonably available to AT&T to perform such work. In no event shall GTE require AT&T to utilize GTE's internal engineering or installation work forces for the engineering and installation of AT&T's physically collocated equipment.
- 2.2.7 GTE shall provide basic telephone service with a connection jack as requested by AT&T from GTE for the collocated space. Upon AT&T's request, this service shall be available at the AT&T collocated space on the day that the space is turned over to AT&T by GTE.
- 2.2.8 GTE shall provide adequate lighting, ventilation, power, heat, air conditioning, and other environmental conditions for AT&T's space and equipment. These environmental conditions shall, subject to Section 23.19 of the General Terms and Conditions of this Agreement, adhere to Bell Communication Research (Bellcore) Network Equipment-Building System (NEBS) standards TR-EOP-000063.
- 2.2.9 [This section intentionally deleted.]
- 2.2.10 GTE shall provide all ingress and egress of fiber and power cabling to AT&T collocated spaces in compliance with AT&T's cable diversity standards to the extent such standards do not exceed GTE's cable diversity standards or the level of diversity it provides to itself. The specific level of diversity required for each site or Network Element will be provided in the collocation request. If AT&T's requirements exceed the level of diversity which GTE provides to itself in such site or to such Network Element, GTE shall at its sole discretion decide whether to provide such superior diversity. If GTE agrees to provide such superior

diversity, AT&T will pay for the provision of the diversity. In such event the price will be established on an individual case basis in accordance with the applicable GTE intrastate access tariff. AT&T will also pay for the provision of such diversity in circumstances where AT&T's requirements do not exceed those provided by GTE for itself in such site or to such Network Element, but where capacity does not exist in the fiber or power cabling to accommodate the provision of diversity requested by AT&T. In such circumstances, the price will be established on an individual case basis in accordance with the applicable GTE intrastate access tariff.

- 2.2.11 This Section 2.2.11 left intentionally blank.
- 2.2.12 GTE shall adhere to the DMOQs, set forth in Attachment 12.
- 2.2.13 GTE will provide answers to AT&T's Environmental, Health & Safety Questionnaire at the first contact meeting for each collocated space in each building in which collocated space is provided.
- 2.2.14 GTE shall provide AT&T with written notice at least two (2) business days prior to those instances in which GTE or its subcontractors may be performing non-emergency work in the general area of the collocated space occupied by AT&T, or in the general area of the AC and DC power plants which support AT&T equipment that is, or potentially may be, service affecting. GTE will inform AT&T by telephone of any emergency related activity that GTE or its subcontractors may be performing in the general area of the collocated space occupied by AT&T, or in the general area of the AC and DC power plants which support AT&T equipment. GTE will use diligent efforts to notify AT&T of any emergency related activity prior to the start of the activity so that AT&T can take any action required to monitor or protect its service.
- 2.2.15 GTE shall construct the collocated space in compliance with AT&T's collocation requests for cable holes, ground bars, doors, and convenience outlets as long as such request is in compliance with Applicable Laws and GTE's grounding requirements. To the extent that such request involves additional work beyond that required to construct the standard GTE collocation space, the price for such construction will be on an individual case basis or as established in accordance with Attachment 14. The standard collocation space shall be equipped with the following:
 - 2.2.15.1 Four 8ft high, or such other height as is appropriate for the specific space, 9 gauge chain link panels;

- 2.2.15.2 One AC outlet;
- 2.2.15.3 An electrical outlet sub-panel;
- 2.2.15.4 Adequate lighting;
- 2.2.15.5 Cage ground bar; and
- 2.2.15.6 One padlock set.

- 2.2.16 AT&T and GTE will complete an acceptance walk through of all collocated space requested from GTE. Exceptions that are noted during this acceptance walk through shall be corrected by GTE within five (5) business days after the walk through. The correction of these exceptions from the original collocation request shall be at GTE's expense.

- 2.2.17 GTE shall provide Telephone Equipment detailed drawings depicting the exact location, type, and cable termination requirements (i.e., connector type, number and type of pairs, and naming convention) for GTE Point of Termination Bay(s) to AT&T at the first mutually scheduled GTE/AT&T collocation meeting with respect to the specific request which meeting shall occur within thirty five (35) days of AT&T's request for collocated space, except in unusual cases.

- 2.2.18 GTE shall provide Telephone Equipment detailed drawings depicting the exact path, with dimensions, for AT&T Outside Plant Fiber ingress and egress into AT&T collocated space at the first mutually scheduled collocation meeting which meeting shall occur within thirty five (35) days of AT&T's request for collocated space, except in unusual cases. Such path and any areas around it in which AT&T must work to perform installation shall be free of friable asbestos, lead paint (unless encapsulated), radon and other health or safety hazards.

- 2.2.19 GTE shall provide detailed power cabling connectivity information including the sizes and number of power feeders to AT&T no later than five (5) days in advance of the first mutually scheduled collocation meeting.

- 2.2.20 GTE shall provide positive confirmation to AT&T when construction of AT&T collocated space is approximately 50% completed. This confirmation shall also include confirmation of the scheduled completion and turnover dates.

- 2.2.21 GTE will make every reasonable effort to meet the negotiated completion and turnover dates, which dates shall be no greater than 120 days from the original collocation request, except in unusual cases or in instances where GTE is precluded from meeting such dates because of delay caused by the need to obtain building permits, despite the use of every reasonable effort by GTE to obtain such permits in time to meet the negotiated dates.
- 2.2.22 GTE shall provide the following information to AT&T no later than five (5) business days in advance of the first mutually scheduled collocation meeting:
- 2.2.22.1 Work restriction guidelines.
- 2.2.22.2 GTE or Industry technical publication guidelines that impact the design of AT&T collocated equipment.
- 2.2.22.3 GTE contacts (names and telephone numbers) for the following areas:
Engineering
Physical & Logical Security
Provisioning
Billing
Operations
Site and Building Managers
Environmental and Safety
- 2.2.22.4 Escalation process for GTE representatives (names, telephone numbers and the escalation order) for any disputes or problems that might arise pursuant to AT&T's collocation.
- 2.2.23 Power as referenced in this Attachment 3 refers to any electrical power source supplied by GTE for AT&T equipment. It includes all superstructure, infrastructure, and overhead facilities, including, but not limited to, cable, cable racks and bus bars. GTE will supply power to support AT&T equipment at equipment specific DC and AC voltages. At a minimum, GTE shall supply power to AT&T at parity with that provided by GTE to itself for similar equipment.
- 2.2.23.1 Central office power supplied by GTE into the AT&T equipment area, shall be supplied in the form of power feeders (cables) on cable racking into the designated AT&T equipment area. The power feeders (cables) shall perform in a manner equal to the efficiency and economy of the power feeders (cables) GTE provides for use with similar GTE

equipment. The termination location shall be mutually agreed upon by the Parties.

- 2.2.23.2 [Intentionally deleted.]
- 2.2.23.3 GTE power equipment supporting AT&T's equipment shall, subject to Section 23.19 of the General Terms and Conditions of this Agreement:
 - 2.2.23.3.1 Comply with applicable industry standards (e.g., Bellcore, NEBS and IEEE) or manufacturer's equipment power requirement specifications for equipment installation, cabling practices, and physical equipment layout;
 - 2.2.23.3.2 Have redundant DC power through battery back-up as required by the equipment manufacturer's specifications for AT&T equipment, or, at minimum, at parity with that provided for similar GTE equipment;
 - 2.2.23.3.3 GTE shall immediately notify AT&T if an alarm condition exists with respect to such monitoring or if backup power has been engaged for any power supporting AT&T's equipment;
- 2.2.23.4 Provide central office ground, in accordance with GTE's grounding requirements; and
- 2.2.23.5 Provide power feeder capacity and quantity to support the equipment layout for AT&T equipment in accordance with AT&T's collocation request and in accordance with Section 2.2.23.1 of this Attachment 3.
- 2.2.23.6 GTE shall, subject to Section 23.19 of the General Terms and Conditions of this Agreement:
 - 2.2.23.6.1 Provide installation sequences and access that will allow installation efforts in parallel without jeopardizing personnel safety or existing AT&T services;
 - 2.2.23.6.2 Provide power plant alarms that adhere to Bell Communication Research (Bellcore) Network Equipment-Building System (NEBS) standards TR-EOP-000063;
 - 2.2.23.6.3 Provide cabling that adheres to Bell Communication Research (Bellcore) Network Equipment-Building System (NEBS) standards TR-EOP-000063;
 - 2.2.23.6.4 Provide Lock-Out Tag Out and other electrical safety procedures and devices in accordance with OSHA or industry guidelines.

- 2.2.23.7 GTE will provide AT&T with written notification within ten (10) business days of any scheduled non-emergency AC or DC power work or related activity in the collocated facility that will or might cause an outage or any type of power disruption to AT&T equipment located in the GTE facility. GTE will use diligent efforts to notify AT&T by telephone of any emergency power activity that would impact AT&T equipment.
- 2.2.23.8 With respect to any work to provide or prepare collocation space (including, without limitation, power supplies and cage construction) proposed to be performed by GTE or its subcontractors or vendors on behalf of AT&T:
- 2.2.23.8.1 GTE shall, within thirty (30) days after a request by AT&T, provide AT&T with a written price for any such work. The price will be accompanied by the following written information: (a) any terms under which the work is proposed to be performed, (b) a reasonably detailed breakdown or explanation of costs underlying the price, and (c) a reasonably detailed description of the technical specifications of the work to be performed. AT&T must approve the price, terms, cost breakdown and technical specifications prior to any work being performed.
- 2.2.23.8.2 Following completion of the work, AT&T and GTE will complete an acceptance walk through of the collocated space in accordance with Section 2.2.16.
- 2.2.24 GTE shall be required to take AT&T demand for collocation space into account when expanding, adding to or altering existing facilities and constructing or leasing new facilities.
- 2.3 Technical References - GTE shall, subject to Section 23.19 of the General Terms and Conditions of this Agreement, provide collocation in accordance with the following standards:
- 2.3.1 Institute of Electrical and Electronics Engineers (IEEE) Standard 383, IEEE Standard for Type Test of Class 1 E Electric Cables, Field Splices, and Connections for Nuclear Power Generating Stations.
- 2.3.2 National Electrical Code (NEC) use latest issue.
- 2.3.3 TA-NPL-000286, NEBS Generic Engineering Requirements for System Assembly and Cable Distribution, Issue 2, (Bellcore, January 1989).
- 2.3.4 TR-EOP-000063 Network Equipment-Building System (NEBS) Generic Equipment Requirements, Issue 3, March 1988.

- 2.3.5 TR-EOP-000151, Generic Requirements for 24-, 48-, 130-, and 140-Volt Central Office Power Plant Rectifiers, Issue 1, (Bellcore, May 1985).
- 2.3.6 TR-EOP-000232, Generic Requirements for Lead-Acid Storage Batteries, Issue 1 (Bellcore, June 1985).
- 2.3.7 TR-NWT-000154, Generic Requirements for 24-, 48-, 130, and 140-Volt Central Office Power Plant Control and Distribution Equipment, Issue 2, (Bellcore, January 1992).
- 2.3.8 TR-NWT-000295, Isolated Ground Planes: Definition and Application to Telephone Central Offices, Issue 2, (Bellcore, July 1992).
- 2.3.9 TR-NWT-000840, Supplier Support Generic Requirements (SSGR), (A Module of LSSGR, FR-NWT-000064), Issue 1, (Bellcore, December 1991).
- 2.3.10 TR-NWT-001275 Central Office Environment Installations/Removal Generic Requirements, Issue 1, January 1993.
- 2.3.11 Underwriters' Laboratories Standard, UL 94.

3. **Poles, Ducts, Conduits, Rights of Way (ROW)**

3.1 **Definitions**

- 3.1.1 An "Attachment" is any placement of AT&T's Facilities in or on GTE's poles, ducts, conduits, or rights of way.
- 3.1.2 A "conduit" is a tube or protected trough that may be used to house communication or electrical cables. Conduit may be underground or above ground and may contain one or more inner ducts.
- 3.1.3 A "duct" is a single enclosed path to house facilities to provide telecommunications services.
- 3.1.4 For the purpose of this Section 3, the terms "Facility" and "Facilities" include anchors, pole hardware, wires, cables, strands, apparatus enclosures, equipment boxes, optical conductors and associated hardware and other telecommunications equipment located on or in a Structure.

- 3.1.4.1 For purposes of this Section 3, the terms "Structure" and "Structures" refer to poles, ducts, conduits and ROW, to the extent owned or controlled by GTE.
- 3.1.5 An "inner duct" is one of the single enclosed pathways located within a duct, or buried separately without the benefit of conduit.
- 3.1.6 The term "make ready work" refers to all work performed or to be performed to prepare GTE's conduit systems, poles or anchors and related facilities for the requested occupancy or attachment of AT&T's Facilities. "Make ready work" includes, but is not limited to, clearing obstructions, the rearrangement, transfer, replacement, and removal of existing Facilities on a pole or in a conduit system where such work is required solely to accommodate AT&T's Facilities and not to meet GTE's business needs or convenience. "Make ready work" may include the repair, enlargement, or modification of GTE's Structures (including, but not limited to, conduits, ducts, or manholes) or the performance of other work required to make a pole, anchor, conduit or duct usable for the initial placement of AT&T's Facilities.
- 3.1.7 A "manhole" is a subsurface enclosure that personnel may enter and use for the purpose of installing, operating, maintaining and repairing communications Facilities.
- 3.1.8 A "pole attachment" is the connection of a Facility to a utility pole.
- 3.1.9 A "Right of Way" ("ROW") is the right to use the land or other property of another party to place poles, conduits, cables, other structures and equipment, or to provide passage to access such structures and equipment. A ROW may run under, on, or above public or private property (including air space above public or private property) and may include the right to use discrete space in buildings, building complexes, or other locations. The existence of a ROW shall be determined in accordance with Applicable Law.
- 3.2 **General Duties**
- 3.2.1 GTE hereby grants to AT&T and AT&T accepts from GTE a non-exclusive license to occupy, place and maintain in or on specified GTE poles, ducts, conduits and ROW, AT&T's Attachments and Facilities on the terms and conditions set forth in this Attachment 3. AT&T shall have no further right, title, or other interest in connection with GTE's poles, ducts, conduits and ROW. GTE shall have the right to grant, renew or extend privileges to others not parties to this Agreement to occupy, place, or maintain Attachments on or otherwise use any or all

GTE poles, ducts, conduits and ROW. GTE grants this license in reliance on the representation of AT&T that AT&T intends to provide Telecommunications Services.

- 3.2.2 GTE shall provide AT&T equal and non-discriminatory access to pole space, ducts, inner ducts, conduit, and ROW, as provided below, it owns or controls. Such access shall be provided to AT&T on terms and conditions as favorable as is provided by GTE to itself or to any other party. Further, GTE shall not preclude or delay allocation of these Structures to AT&T because of the potential needs of itself or of other parties, except as provided below. This general duty is subject to any agreements or easements that would prohibit GTE from providing such access on specific pole space, ducts, conduit, or ROW to AT&T. If GTE determines that access to specific pole space, ducts, conduit, or ROW is precluded by an agreement or easement, AT&T shall have the right to review the pertinent provisions of the agreement or easement.
- 3.2.3 GTE will not enter into any agreements with owners that restrict the ability of the owner to reach agreements with AT&T regarding access to ROW and ancillary pathways to the customer, such as entrance facilities, cable vaults, telephone closets, equipment rooms, risers, and other similar passageways.
- 3.2.4 GTE shall provide to AT&T a Regional Single Point of Contact to resolve issues that arise in the implementation of this Agreement.
- 3.2.5 Excepting maintenance and emergency ducts as provided below, all useable but unused space on poles, conduits, ducts or ROW owned or controlled by GTE shall be available for the attachments of AT&T, GTE or other providers of Telecommunications Services or cable television systems; provided, however, GTE may exclude or condition access for reasons of safety, reliability and generally applicable engineering standards, provided that such exclusions and conditions are consistent with those that GTE applies to its own use of poles, ducts, conduits and ROW. Neither AT&T, GTE nor any other person may reserve space on GTE owned or controlled poles, conduits, ducts or ROW for its future needs, unless GTE permits AT&T, GTE or any other person to reserve space on GTE-owned or controlled poles, conduits, ducts or ROW for specific planned projects over the same time period. To the extent that GTE decides to permit such reservations it shall do so in a nondiscriminatory and competitively neutral manner and shall not favor itself or any of its affiliates and it shall notify AT&T in writing 30 days in advance of implementing such decision of the reservation process it intends to follow. Such reservations may only be for specific projects

for which a party, including GTE or any of its affiliates, can demonstrate a specific commitment by producing detailed engineering plans. GTE may reserve for emergency and maintenance purposes one duct in each conduit section of its facility routes. Such duct shall be equally accessible and available by any party with Facilities in such conduit section to use to maintain its Facilities or to restore them in an emergency.

3.3 Pre-Ordering Disclosure Requirements

3.3.1 AT&T may request information regarding the availability and conditions of poles, ducts, conduits, and ROW prior to the submission of Attachment Requests. GTE shall provide information regarding the availability and condition of GTE's poles, ducts, conduits, or ROW for Attachments within thirty (30) business days. If it is unable to inform AT&T about availability and conditions within the thirty-day interval, GTE shall advise AT&T within ten (10) days after receipt of AT&T's information request and will seek a mutually satisfactory time period for GTE's response. If GTE's response requires a field-based survey, AT&T shall have the option to be present at the field-based survey and GTE shall provide AT&T at least twenty-four (24) hours notice prior to the start of such field survey. During and after this period, GTE shall allow AT&T personnel to enter manholes and view pole structures to inspect such structures in order to confirm usability or assess the condition of the structure.

3.3.2 GTE shall make available to AT&T for inspection marked street maps and as-built drawings showing existing poles, conduit or other ROW at GTE's area engineering offices, upon reasonable advance notification. If the Parties can ascertain the availability of a specific point-to-point route at the time of viewing, GTE will make the maps and pole prints available for copying. In making these maps and prints available, GTE makes no express or implied warranty as to the accuracy of these maps and prints, other than to represent that they are the maps and prints GTE uses in its day-to-day operations. GTE reserves the right to deny subsequent requests to see previously viewed maps and prints if AT&T does not have a good faith intention to submit an Attachment Request relating to the areas described.

3.3.3 AT&T shall pay GTE a reasonable administrative fee to cover the direct cost of providing conduit maps and prints.

3.4 Attachment Requests

3.4.1 GTE agrees to permit AT&T to place AT&T's Facilities on or in GTE's poles, ducts, conduits, and ROW pursuant to Attachment Requests from AT&T approved in accordance with this Section 3.4 on the terms and conditions set forth herein. GTE may not restrict AT&T's ability to construct, maintain and monitor its facilities at these sites to any greater extent than GTE restricts its own ability to construct, maintain and monitor the same facilities.

3.4.2 For access to GTE owned or controlled poles, AT&T will follow this process: (a) AT&T forwards a completed pole attachment inquiry/request form to GTE; (b) GTE reviews inquiry/request form and verifies the availability of space and communicates availability information back to AT&T within 30 business days; (c) AT&T decides whether it wants space; (d) If AT&T wants space, it will provide three (3) copies of maps, pole lease application and permit, permit compliance letter, rearrangement worksheet ("make ready" sheet); (e) AT&T will provide a check to cover the costs of GTE inspection and the first year's rent pro-rated to the next (annual) billing period. At this point, AT&T is guaranteed space and GTE opens a work order; (f) GTE uses make ready sheets to inspect the poles for proper build and identification of possible infractions. This process could take up to 45 days depending upon the size of the job; (g) GTE provides to AT&T a corrected copy of the make ready sheets and gives AT&T permission to start its build; (h) AT&T has 60 to 90 days to begin construction, but can start construction immediately upon receiving permission; (i) After construction is complete AT&T will notify GTE. GTE will complete a final inspection and identify infractions on a "gig" sheet provided back to AT&T. AT&T has 30 days to fix infractions; and (j) AT&T will notify GTE when work is complete and GTE will do one last inspection and close work order.

3.4.3 For access to GTE owned or controlled ducts or conduit, AT&T will follow this process: (a) AT&T forwards a completed conduit/duct occupancy inquiry/request form to GTE; (b) GTE reviews inquiry/request form for availability, but not integrity of conduit/duct and communicates availability information back to AT&T within 30 business days; (c) AT&T decides whether it wants conduit/duct, and if so requests to know the integrity of the conduit/duct. Prior to integrity verification, GTE will require either an engineering deposit or an escrow account for the inspector's or single source provider's (SSP) time; (d) Upon receipt of the deposit or escrow funds, AT&T can request GTE (SSP) to pull a slug through the duct to validate integrity. If and when

requested, GTE will do so and will also attach a mule tape to the back end of the slug to get an accurate read (footage) from point A to point B of the conduit/duct. Alternatively, AT&T can have its approved vendor pull a slug with GTE's inspector watching; (e) Once the integrity of the conduit/duct is validated, AT&T will provide a check for the first year's rental associated with the amount of the actual footage to be leased pro-rated to the next (annual) billing period and an engineering design within 30 business days, which will provide procedures for access to the conduit/duct including, but not limited to a gas test procedure, a procedure for dealing with water in manholes which are used to access the conduit/duct, and how AT&T will guard the other Facilities in the manhole during its work. At this point conduit/duct is guaranteed to AT&T; (f) AT&T will access the conduit/duct through a manhole, a cable equipment vault or another mutually agreed means; (g) AT&T will be given 60 to 90 days to start construction, but can start construction immediately, at the point conduit/duct is guaranteed to AT&T; (h) After construction is complete, AT&T will notify GTE; and (i) GTE will complete a visual inspection of the job as well as any inspections during construction that GTE deems are necessary.

- 3.4.4 GTE's single point of contact will provide or will arrange to provide to AT&T any information known or available to GTE regarding environmental, health and safety matters for each GTE Structure in or on which AT&T seeks an Attachment no later than the time that GTE approves an AT&T Attachment Request. Information is considered available if it is in GTE's possession. GTE represents that the information provided by GTE will be the best information available to GTE at the time the information is provided. GTE does not represent that any information provided reflects the actual condition of the Structure at the time the information is provided, or at the time AT&T enters or seeks an Attachment at the Structure, nor that no change has occurred in such conditions between the time such information is provided and the time AT&T enters or seeks an Attachment at the Structure, and AT&T acknowledges that no such representations are made, however, GTE shall inform AT&T of any changes in the information provided to AT&T as soon as practicable after the change is known or available to GTE.

3.5 **Authority to Place Attachments**

- 3.5.1 Before AT&T places any Attachment pursuant to an approved Attachment Request, AT&T shall submit evidence of its authority to erect and maintain the Facilities to be placed on GTE's Structures within the public streets, highways and other thoroughfares or on

private property, where such authority is required by law. AT&T shall be solely responsible for obtaining all licenses, authorizations, permits, and consent from federal, state and municipal authorities or private property owners that may be required to place Attachments on GTE's Structures.

3.5.2 GTE shall not unreasonably intervene against or attempt to delay the granting of any licenses, authorizations, permits or consents from federal, state and municipal authorities or private property owners that may be required for AT&T to place its Attachments on or in any poles, ducts, conduits, or rights of way, including those that GTE owns or controls.

3.5.3 If any license, authorization, permit or consent obtained by AT&T from an authority, which for the purposes of this Section 3.5.3 does not include GTE, is subsequently revoked or denied for any reason, permission to attach to GTE's Structures shall terminate immediately and AT&T shall remove its Attachments within the time required by such authorities, or absent such time, within ninety (90) days after AT&T receives notification of revocation or denial. AT&T may, at its option, litigate or appeal any such revocation or denial and if AT&T is diligently pursuing such litigation or appeal, AT&T may continue to maintain its Attachment. In doing so, AT&T agrees to indemnify GTE from and against any and all costs resulting from GTE's continuation of the Attachment which is the subject of such litigation or appeal. If AT&T does not appeal and AT&T fails to remove AT&T's Attachments within the above specified time period, GTE shall have the option to remove AT&T's Attachments and store them in a public warehouse at the expense of and for the account of AT&T without GTE being deemed guilty of trespass or conversion, and without GTE becoming liable for any loss or damage to AT&T's Attachments occasioned thereby. Alternatively, GTE may remove AT&T's Attachments and store them upon GTE's premises, in which event, GTE shall use the same standard of care to protect AT&T's Attachments that GTE uses for protecting GTE's own facilities and equipment. All reasonable costs incurred by GTE to remove AT&T's Attachments shall be reimbursed to GTE by AT&T upon demand.

3.6 Capacity

3.6.1 When there is insufficient space on a GTE pole or in a GTE conduit to accommodate an AT&T requested Attachment or occupancy, GTE shall take all reasonable steps to accommodate AT&T's requests for Attachments or occupancy where such access would require expansion

of capacity. The costs of modifications required for expansion will be paid as provided in the FCC First Report and Order Paras. 1211-1216.

3.6.2

With GTE's consent, which consent shall not be unreasonably withheld, AT&T may break out of GTE conduit where there is no reasonable engineering alternative. Where required by GTE and upon forty-eight (48) hours prior notice from AT&T unless emergency circumstances dictate otherwise, GTE shall provide AT&T designated personnel with an escort service. Such escort service shall be available during normal business hours for such assignments. Prior to the start of work, AT&T and the GTE escort will discuss the manner in which the work will be performed and GTE's reasonable requirements for ensuring the integrity of the conduit, protecting the Facilities contained in the conduit, protecting personnel and public safety and for preventing service interruptions. GTE Outside Plant Personnel will determine whether escort services are required on a case by case basis. This determination will be based on AT&T's adherence to GTE's requirements for plant protection procedures and the industry-standard construction and access procedures used by AT&T. Nonetheless, GTE may require escort service in its sound discretion, provided, however, that AT&T shall not be required to reimburse GTE for more than the number of persons as are necessary and prudent for providing the appropriate escort service.

3.6.3

GTE shall permit manhole interconnections and breaking out of GTE manholes. Where required by GTE and upon forty-eight (48) hours prior notice from AT&T unless emergency circumstances dictate otherwise, GTE shall provide AT&T designated personnel with an escort service. Such escort service shall be available during normal business hours for such assignments. Prior to the start of work, AT&T and the GTE escort will discuss the manner in which the work will be performed and GTE's reasonable requirements for ensuring the integrity of the manhole structure, protecting the Facilities contained in the manhole structure, protecting personnel and public safety and for preventing service interruptions. GTE Outside Plant Personnel will determine whether escort services are required on a case by case basis. This determination will be based on AT&T's adherence to GTE's requirements for plant protection procedures and the industry-standard construction and access procedures used by AT&T. Nonetheless, GTE may require escort service in its sound discretion, provided, however, that AT&T shall not be required to reimburse GTE for more than the number of persons as are necessary and prudent for providing the appropriate escort service. GTE reserves the right to deny AT&T requests to break out of manholes where the break out does not occur

at precast knockout locations or where the location in which AT&T wants to break out is blocked by cable rack.

3.6.4 GTE shall take all reasonable measures to allow access and/or egress to all conduit systems. This shall include but not be limited to GTE's removal, upon AT&T's request and at AT&T's expense by paying GTE the actual costs incurred, of any retired cable from conduit systems to allow for the efficient use of conduit space within a reasonable period of time. If the Parties are unable to agree on what is reasonable (in terms of measures or time intervals), the matter may be submitted according to the Alternate Dispute Resolution Process, described in Attachment 1, by either Party. The costs of removal will be paid as provided in the FCC First Report and Order Paras. 1211-1216.

3.6.5 [Intentionally deleted.]

3.6.6 Where a spare inner duct does not exist, GTE shall allow and AT&T shall be required to install all inner duct in a spare GTE conduit. If another attaching entity, including GTE, uses the inner duct installed by AT&T, GTE shall inform AT&T and such entity shall share in the depreciated cost of the installation of the inner duct in proportion to the amount of the inner duct being used by that entity.

3.6.7 GTE shall not attach, or permit other entities to attach Facilities on existing AT&T Facilities without AT&T's prior written consent.

3.7 **Sharing of Rights of Way**

3.7.1 GTE shall offer the use of such ROW it has obtained from a third party to AT&T, to the extent that GTE's agreement or easement with the third party does not prohibit GTE from granting such rights to AT&T. AT&T shall have the right to review the pertinent parts of the agreement or easement between GTE and the third party when GTE asserts that the agreement or easement prohibits the granting of such rights or if, having agreed to grant such rights, GTE refuses to warrant that it has the authority to grant such rights. In cases where GTE does not have the authority to grant access, GTE shall provide the owner contact information if known to GTE and will not interfere in AT&T's obtaining such access and shall not prevent or delay any third party assignment of rights-of-way to AT&T.

3.7.2 [Intentionally deleted.]

3.8 Emergency Situations

- 3.8.1 Within fifteen (15) business days after the Effective Date, GTE shall establish a non-discriminatory priority method to access GTE manholes and conduits in emergency situations.

3.9 Attachment Fees

- 3.9.1 AT&T shall pay to GTE an Attachment Fee, consistent with Applicable Law for each GTE Structure upon which AT&T obtains authorization to place an Attachment.
- 3.9.2 GTE shall maintain an inventory of the GTE Structures occupied by AT&T based upon the cumulative Facilities specified in all Requests for Attachment approved in accordance with Section 3.4 of this Attachment 3. AT&T shall have the right to remove any Attachment at any time, and it shall be AT&T's sole responsibility to notify GTE of any and all removals by AT&T of its Attachments from GTE's Structures. Such notice shall be provided to GTE at least thirty (30) days prior to the removal of the Attachments and shall take the form of a Notice of Removal. AT&T shall remain liable for an Attachment Fee for each GTE facility included in all approved Attachment Requests until the Attachment is removed by AT&T. GTE may, at its option, conduct a physical inventory of AT&T's Attachments for purposes of determining the Attachment Fees to be paid by AT&T under this section.

3.10 Additions and Modifications to Existing Attachments

- 3.10.1 AT&T shall not modify, add to or replace Facilities on any pre-existing Attachment without first notifying GTE in writing of the intended modification, addition or replacement at least thirty (30) days prior to the date the activity is scheduled to begin. The required notification shall include: (1) the date the activity is scheduled to begin, (2) a description of the planned modification, addition or replacement, (3) a representation that the modification, addition or replacement will not require any space other than the space previously designated for AT&T's Attachments, and (4) a representation that the modification, addition or replacement will not impair the structural integrity of the Structures and Facilities involved.
- 3.10.2 If the modification, addition or replacement specified by AT&T in its notice will require more space than that allocated to AT&T or will require the reinforcement or replacement of or an addition of support equipment to the Structures or Facilities involved in order to

accommodate AT&T's modification, addition or replacement, AT&T will submit a Attachment Request in compliance with this Section in order to obtain authorization for the modification, addition or replacement of its Facilities.

3.11 Charges for Unauthorized Attachments

3.11.1 It is agreed that a charge equal to two (2) times the amount of the then current Attachment Fee shall be paid by AT&T to GTE for each Unauthorized Attachment to a GTE Structure for the period of time for which the Attachment is unauthorized provided that the lack of authorization as due to the act, or failure to act, of AT&T. Such payment shall be deemed liquidated damages and not a penalty. AT&T also shall pay GTE an Attachment Fee for each Unauthorized Attachment accruing from the date the Unauthorized Attachment was first placed on the GTE Structure. In the event that the date the Unauthorized Attachment was first placed on a GTE Structure cannot be determined, such date shall be deemed the date of the last physical inventory made in accordance with this Agreement or, if no physical inventory has been conducted, the date the first Attachment Request from AT&T was approved in accordance with this Agreement. If AT&T elects to leave the Attachment in place, AT&T also shall pay to GTE all costs incurred by GTE to rearrange any Unauthorized Attachment(s) of AT&T in order to accommodate the Attachment(s) of another party whose Attachment(s) would not have required a rearrangement but for the presence of AT&T's Unauthorized Attachment(s). If AT&T elects to leave the Attachment in place, AT&T shall also pay to GTE all costs incurred by GTE to reinforce, replace or modify a GTE Structure, which reinforcement, replacement or modification was required as a result of the Unauthorized Attachment of AT&T. The Attachment Fee referenced in this subsection shall be determined in the same manner as such fee would have been determined if the Attachment had been authorized by GTE.

3.11.2 For purposes of this section, an Unauthorized Attachment shall include, but not be limited to: (a) an Attachment on or in any GTE Structure, which Structure is not identified in any Attachment Request approved in accordance with this Attachment 3; (b) an Attachment that occupies more space than that allocated to AT&T by GTE; (c) an addition or modification to a pre-existing Attachment that impairs the structural integrity of the involved GTE Structure or Facilities; (d) an Attachment installed by AT&T for the use of a party other than AT&T. An Unauthorized Attachment does not include an Attachment which AT&T

demonstrates was made mistakenly, but in good faith pursuant to an approved Attachment Request for another location(s).

3.12 Surveys and Inspections of Attachments

3.12.1 The exact location of AT&T's Attachments on or in GTE's Structures may be determined, at GTE's discretion, through a survey to be made by GTE. If so requested, AT&T and/or any other entity owning or jointly owning the Structures with GTE may participate in the survey. If the survey reveals one or more unauthorized Attachments by AT&T, AT&T shall reimburse GTE all expenses incurred in conducting the survey.

3.12.2 Apart from surveys conducted in accordance with Section 3.12.1 above, GTE shall have the right to inspect any Attachment of AT&T on or in GTE's Structures as conditions may warrant. No joint survey or inspection by GTE shall operate to relieve AT&T of any responsibility, obligation or liability assumed under this Agreement.

3.13 Notice of Modification or Alteration of Structures by GTE

If GTE plans to modify or alter any GTE Structures upon which AT&T has Attachments, GTE shall provide AT&T notice of the proposed modification or rearrangement at least sixty (60) days prior to the time the proposed modification or alteration is scheduled to take place. AT&T shall be allowed to participate with GTE in such modification or rearrangement. AT&T shall make all rearrangements of its Facilities within such period of time as is jointly determined to be reasonable by the Parties based on the amount of rearrangements necessary and a desire to minimize chances for service interruption or facility-based service denial to an AT&T customer.

To the extent AT&T benefits from such modification or rearrangement or obtains access to such Structure as a result of the modification, AT&T shall pay GTE AT&T's proportionate share of the costs incurred. If AT&T has a preexisting Attachment to the modified Structure it shall be deemed to directly benefit from a modification if, after receiving notification of such modification, it adds to or modifies its Attachment. Notwithstanding the foregoing, if AT&T has a preexisting attachment to a Structure it shall not be required to bear any of the costs of rearranging or replacing its Attachment if such rearrangement or replacement is necessitated solely as a result of an additional Attachment or the modification of an existing Attachment sought by a third party or GTE. If AT&T makes an Attachment to the Structure after the completion of the modification, it shall share proportionately in the cost of the modification with GTE and any contributing third parties, if such modification rendered possible the added Attachment.

3.14 Default and Remedies

- 3.14.1 The occurrence of any one of the following shall be deemed a Material Default by AT&T: (a) Failure by Licensee to perform or observe any term, condition, covenant, obligation or provision of this Attachment 3 and such default continues for a period of thirty (30) days after written notice thereof from GTE (provided that if such default is not curable within such thirty (30) day period, the period will be extended if Licensee commences to cure such default within such thirty (30) day period and proceeds diligently thereafter to effect such cure); (b) AT&T's knowing use or maintenance of its Attachments in violation of any law or regulation, or in aid of any unlawful act or undertaking; (c) If any authorization which may be required of AT&T by any governmental or private authority for the placement, operation or maintenance of AT&T's Attachments is denied or revoked, and any appeals or other actions for review of such denial or revocation have been completed.
- 3.14.2 In the event of a Material Default, the provisions of Section 3.18.1 shall apply.
- 3.14.3 All rights and remedies of GTE set forth in this Agreement shall be cumulative and none shall exclude any other right or remedy, now or hereafter allowed by or available under any statute, ordinance, rule of court, or the common law, either at law or in equity, or both, except that GTE may not exercise any of the remedies set forth in Section 3.14.2 if such Material Default is the subject of Alternate Dispute Resolution procedures as set forth in Attachment 1 to the Agreement.
- 3.15 Termination of Section 3 by AT&T**
- 3.15.1 Section 3 of Attachment 3 of this Agreement may be terminated by AT&T any time prior to the expiration of its term by providing written notice to GTE of its intent to terminate not less than ninety (90) days prior to the date such termination is to become effective. Within ninety (90) days after the date this Section 3 is terminated, AT&T shall cause all of its Attachments to be removed from all of GTE's poles. In the event AT&T fails to remove its Attachments as required by this section, GTE shall have the option to remove all such Attachments and store them in a public warehouse or elsewhere at the expense of and for the account of AT&T without GTE being deemed guilty of trespass or conversion, and without GTE becoming liable for any loss or damages to AT&T occasioned thereby.

3.16 Indemnification

AT&T shall indemnify GTE as set forth in Section 10 of the General Terms and Conditions of this Agreement.

3.17 Abandonment

3.17.1 Nothing in this Agreement shall prevent or be construed to prevent GTE from abandoning, selling, assigning or otherwise disposing of any poles, conduit systems, or other GTE property used for AT&T's Attachments, provided, however, that GTE shall condition any such sale, assignment or other disposition subject to the rights granted to AT&T pursuant to this Agreement. GTE shall promptly notify AT&T of any proposed sale, assignment or other disposition of any Structures or other GTE property used for AT&T's Attachments.

3.18 Alternate Dispute Resolution

3.18.1 If GTE has declared AT&T in default of any provisions of this Section 3, or has otherwise notified AT&T that AT&T is not in compliance with the terms of this Section 3, either party may invoke the Alternate Dispute Resolution Process, described in Attachment 1, or the procedures described in the Act, the *FCC's First Interconnection Order*, § 1217-1231 and the FCC's Rules at 47 CFR §1.1401-1.1416. GTE will continue to process Attachment Requests pursuant to this Section 3.18.1 so long as ADR or one of the other procedures described in this section has been initiated and is still pending.

3.18.2 GTE will not be relieved of its obligations to process Attachment Requests by AT&T if AT&T is alleged to be in default of this Section 3 for nonpayment of fees and charges due GTE under this Section 3, so long as such default is (1) the subject of good faith negotiations; (2) the subject of Alternate Dispute Resolution procedures as set forth in Attachment 1 to the Agreement; or (3) being adjudicated before the FCC or any other court, regulatory body, agency, or tribunal having jurisdiction over such dispute.